

Summary of Cancer Incidence and Mortality for Zip Code 29080 (Lynchburg, SC)

Cancer Incidence in Zip Code 29080

The first step in the analysis was to look at the number of new cancer cases diagnosed in the zip code and compare this to the number of cancer cases expected in the zip code. This first step determines if there is anything unusual in the observed cancer patterns in the area. The number of "expected" cancer cases is calculated by using state cancer rates and applying them to the population of the zip code.

Table 1 shows what types of cancer were diagnosed in zip code 29080 from 1996-1999. The table also shows how many cases of each type of cancer were expected. Zip code 29080 had fewer cases of cancer than expected. The most common types of cancer occurring in the zip code were prostate, lung, colorectal, and female breast cancers. These four types of cancer are also the most common cancers occurring across all of South Carolina.

Cancer Deaths in Zip Code 29080

To assess cancer deaths in the zip code, cancer mortality data from 1996 through 2000 were used. This is the most current death data available. The same process used to analyze new cancer cases was also used to analyze cancer deaths. Table 2 shows the number of cancer deaths that occurred and the number of cancer deaths expected in the zip code. Zip code 29080 had more cancer deaths than expected; however, this difference was not statistically significant.

Conclusions

To summarize, zip code 29080 had fewer cases of cancer than expected. Looking at cancer deaths, zip code 29080 had more cancer deaths than expected; however, this difference was not statistically significant. There were no specific types of cancer where the number of cases or deaths was significantly elevated.

A cancer cluster exists when the number of cancers that occurs is more than would be expected by chance. A cancer cluster is more likely to involve rarer cancers, such as bladder and brain, rather than more common cancers, like breast or prostate. Also, a cancer cluster would occur with one specific type of cancer rather than having excesses in many different types of cancer. Overall, we do not see any evidence of cancer clustering or of cancers resulting from environmental exposures in this zip code.

For questions about this report, please contact Laura Sanders at the SC Central Cancer Registry.

Report provided by:

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References

1. American Cancer Society, 2001. www.cancer.org

Information on cancer incidence provided by the SC Central Cancer Registry, Office of Public Health Statistics and Information Services, SC Dept. of Health and Environmental Control.

Information on cancer mortality provided by the Division of Biostatistics, Office of Public Health Statistics and Information Services, SC Dept. of Health and Environmental Control.

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Table 1. Analysis of New Cancer Cases in Zip Code 29080, 1996-1999

<u>Cancer Site</u>	<u>Observed No. of Cases</u>	<u>Expected No. of Cases</u>	<u>Observed/Expected</u>	<u>Chi-SquareTest*</u>
Prostate	16	12.2	1.31	1.16
Lung/Bronchus	10	12.3	0.81	0.44
Colon/Rectum	9	9.1	0.98	0.00
Breast (Female)	5	11.7	0.43	3.81
All Sites	67	77.7	0.86	1.47

Excludes in situ cases of cancer to allow for comparison.

Excludes cancer sites with less than 5 cases of cancer expected due to the unreliability of statistical tests based on small numbers.

*The Chi-Square Statistical Test allows us to determine if the difference between what is observed and what is expected is significant. If the value is greater than 3.84, then we are 95% confident that the observed number of cases is significantly different from the expected number of cases.

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Table 2. Analysis of Cancer Deaths in Zip Code 29080, 1996-2000

<u>Cancer Site</u>	<u>Observed No. of Deaths</u>	<u>Expected No. of Deaths</u>	<u>Observed/Expected</u>	<u>Chi-SquareTest*</u>
Lung/Bronchus	16	13.6	1.18	0.44
All Sites	49	46.7	1.05	0.11

Excludes cancer sites with less than 5 cancer deaths expected due to the unreliability of statistical tests based on small numbers.

*The Chi-Square Statistical Test allows us to determine if the difference between what is observed and what is expected is significant. If the value is greater than 3.84, then we are 95% confident that the observed number of deaths is significantly different from the expected number of deaths.

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